# CITY OF ORANGE BEACH ALABAMA

# COMMUNITY PRESERVATION AND GROWTH MANAGEMENT PLAN



Adopted March 9, 2020

2020 - 2035

Funding for this project was provided by the Alabama Department of Conservation and Natural Resources, State Lands Division, Coastal Section, in part, by a grant from the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management, Award Number NA18NOS4190143.



This Plan's mission, vision, and goals were developed by the 2019 Orange Beach Planning Commission members with assistance provided from the South Alabama Regional Planning Commission.

Special appreciation and thanks in the development of this Plan goes to: The Planning Commission, the Community Development Director, Kit Alexander and her staff; all of the citizens who participated in the Community Response Survey and all who attend the Planning Commission meetings and workshops. Thank you for your support of this Plan and for your time and efforts.



Life is better here

# TABLE OF CONTENTS

PREFACE and MISSION STATEMENT	i
LAND USE	.1
ENVIRONMENTAL	.11
POPULATION AND ECONOMY	.23
HOUSING	.29
TRANSPORTATION	.31
COMMUNITY FACILITES AND SERVICES	.41

Assistance provided by South Alabama Regional Planning Commission



CITY OF ORANGE BEACH COMMUNITY PRESERVATION AND GROWTH MANAGEMENT PLAN TABLE OF CONTENTS

Life is better here

Assistance provided by South Alabama Regional Planning Commission



Life is better here

#### Preface

Our Comprehensive Planning Program has been and will continue to be an ongoing process. The City of Orange Beach believes that economic, environmental, cultural, and social values are inseparably related. The quality of life so valued depends on economic opportunity for all and promoting a thriving and diverse economy, while preserving our small coastal town atmosphere and natural beauty and resources. This challenge is being met as the City seeks to find the balance through planning.

As part of this planning process we will be recalling Horizons 2020, a community-based planning initiative conducted in 2005 to engage members of our business and residential community in the development of the short, medium, and long-term goals and vision for our city through the year 2020. The elements for consideration were quality of life, transportation, environment and land use planning. The goals established in the Horizons 2020 initiative were instrumental and a major contributor to the 2006 Community Comprehensive Plan.

The City anticipates future growth through self-reliance, innovation, and community investment. Orange Beach values and nurtures our existing businesses and heartily welcomes appropriate new businesses to the City. In addition to encouraging new growth, the City supports the protection of the predominantly rural nature of lands recently annexed and continues to support protection of our air, water and land resources as well as preservation of single-family neighborhoods for our full-time residents. The future of Orange Beach lies with following a vision and plan for the future. The City will seek participation and collaboration from all segments of our community in assessing needs, evaluating performance and modifying this ongoing planning process.

#### **Mission Statement**

The City of Orange Beach strives to enhance and protect the economic, educational, social and environmental qualities of our city by providing the appropriate and expected municipal services that enrich the quality of life for our residents and guests.



CITY OF ORANGE BEACH COMMUNITY PRESERVATION AND GROWTH MANAGEMENT PLAN PREFACE AND MISSION STATEMENT

Life is better here



# Life is better here

## LAND USE

The purpose of this land use section is to identify existing land use patterns and set forth the physical plan for the future development of the City of Orange Beach. This section designates the appropriate location for future land uses and establishes policies regarding the location and development of all land uses. The City of Orange Beach also recognizes the impacts of development on the natural environment and continues to require habitat protection and encourages risk-based planning for natural hazards.

#### **Inventory and Analysis**

The inventory and analysis of the existing land use patterns are an integral part of the community planning process because the future development of Orange Beach will be based on strengthening the positive aspects of present and past land use patterns.

The Comprehensive Plan divides Orange Beach into five districts. The Mission Statement for the City follows along with a brief description of each district.

## Mission Statement for the City of Orange Beach

The City of Orange Beach strives to enhance and protect the economic, educational, social and environmental qualities of our city by providing the appropriate and expected municipal services that enrich the quality of life for our residents and guests.

### **The Gateway District**

Highway 161 serves as the only north-south corridor in the city. Geographically defined as all properties located along Highway 161, the Gateway District presently contains the municipal office complex, municipal justice center, medical arts building, and small to medium-sized businesses. The eastern edge of the Gulf State Park is also located in this district as well as the eastern starting point for the Backcountry Trail. There are some single-family dwellings located near the Marina Road intersection. The proposed Wolf Bay Bridge will be in this district north of the Highway 161/180 intersection and will connect Orange Beach with the Josephine and Lillian communities to the north with the future goal of extending the route to Interstates 10 and 65.

#### Mission Statement for the Gateway District

The City of Orange Beach seeks to continue to improve the street corridor by planting trees and heavy landscaping, implementing architectural standards for new developments and enhancing pedestrian-oriented areas with pedestrian amenities such as benches and public art.

#### The Beach Resort District

The Beach Resort District is situated along Highway 182 and contains Romar Beach, Alabama Point and Perdido Key. This district encompasses all beachfront properties and properties located on the north side of Highway 182 between the Gulf State Park and the Florida state line.



Developments in this district provide the base for the local economy. Mid to high-rise condominiums and hotels are predominantly south of Highway 182 on the beachfront. A few of these developments, such as the Perdido Beach Resort and Island House Hotel, have supporting commercial elements. Perdido Key, located between Perdido Pass and the Florida state line, has multi-family developments on both sides of Highway 182 and minimal commercial development. Along the north side of Highway 182, west of Perdido Pass, retail, restaurants, and low-rise condominiums are present. Single-family dwellings in this district have decreased during the past several years. However, there are several singlefamily residential Planned Unit Developments in this district that include Beachside, Grande Key, Palm Harbor, River Run, Romar Villas, Sherrill's Landing, Cottages at Romar and the Village of Tannin.

#### Mission Statement for the Beach Resort District

The City of Orange Beach seeks to continue to adhere to the Beach Overlay District requirements, increase pedestrian paths that encourage pedestrian traffic between developments, sustain and enhance commercial development and expand facilities at existing beach access points.

#### **East Orange Beach District**

This district is located east of Highway 161, north of Cotton Bayou, Terry Cove and Bayou St. John and south of Wolf Bay, Bay La Launch and Arnica Bay. The area contains multiple single-family residential neighborhoods which include Bear Point, East Orange Beach, Gulf Bays Tract, Terry Cove, Marina Road and Cotton Bayou. Marinas

Life is better here

containing small retail, restaurants, and low-rise condominiums are in this area, with most being situated along Terry Cove.

#### Mission Statement for the East Orange Beach District

The City of Orange Beach seeks to preserve, protect and maintain the integrity of all single-family residential neighborhoods by limiting multi-family developments and retail/commercial developments along Canal Road, while accommodating marinas near waterways with businesses common to water-based communities (i.e., bait shops, boat sales, small retail stores, restaurants).

#### The Northwest Orange Beach District

This district is located west of Highway 161, south of Wolf Bay and the Gulf Intracoastal Waterway (ICW), north of the Gulf State Park and stretches to the west corporate limits. The incorporated area along the Foley Beach Express north of the ICW is also in this neighborhood. There is one mixed-use development located in the district, the Wharf of Orange Beach, and one mixed-residential development, Cypress Village. Many single-family neighborhoods are in this area and include Lauder Place, Gulf Bay Road, Beaver Creek, Captain's Cove, Wolf Bay Terrace, the Pines, Oak Ridge and Mulligan Place. This area is envisioned to contain single-family and mixed-residential neighborhoods, retail, professional office and medical office, with amusement parks, resort hotels, entertainment districts, medical facilities and educational campuses along the Foley Beach Express.



# Mission Statement for the Northwest Orange Beach District

The City of Orange Beach seeks to preserve, protect and maintain the integrity of the existing neighborhoods while providing an opportunity for suitable mixed-residential and commercial developments, integrating Traditional Neighborhood Design Criteria (TND) and limiting the use of cul-de-sacs. The City also seeks to provide additional water access and create a viewshed to be enjoyed by all.



Source: Orange Beach

#### The Wolf Bay District

The Wolf Bay District contains land east of Wolf Bay and north of Bay La Launch and Arnica Bay. The proposed Wolf Bay Bridge will link Orange Beach to County Road 95, County Road 20, Highway 98 and eventually Interstates 10 and 65 to the north. Single-family residential is the current primary land use on this side of the bay Life is better here

with limited marina and commercial usage in the Pirate's Cove/Roberts Bayou area.

This area is envisioned to become a resort area with working waterfronts that include businesses common to water-based communities (i.e., marinas, bait shops, boat repairs, small retail stores, restaurants) offering access to the waterfront, creating a town center, encouraging mixed-use with commercial support, and providing for walkability and multi-modal components.

#### Mission Statement for the Wolf Bay District

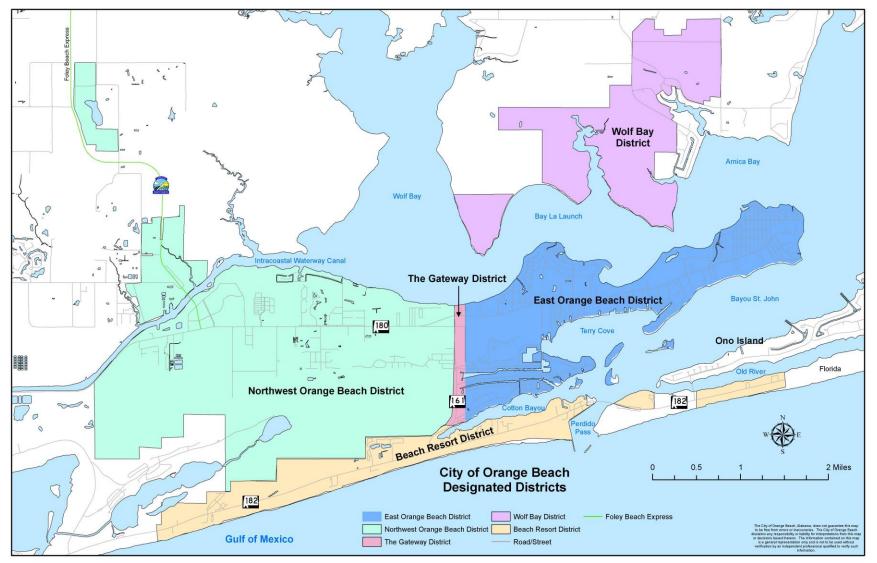
The City of Orange Beach seeks to further single-family residential development emphasizing and encouraging Traditional Neighborhood Design (TND) while promoting working waterfront / marina developments, as well as resort type developments. Once the Wolf Bay Bridge and supporting roads are completed, the Plan encourages a viewshed by providing a scenic landscaped roadway as this area will serve as a gateway to Orange Beach.



Source: Orange Beach



Life is better here



Source: City of Orange Beach



# Land Use

This Plan uses nine categories to describe existing land use. A brief description of each category follows:

### Land Use Categories

#### Neighborhood Preservation

The Neighborhood Preservation category aims to strengthen and maintain existing single-family residential neighborhoods. This includes low density single-family neighborhoods primarily on standard lots. Single-family residential areas are typically defined as a collection of individual lots with each lot containing one singlefamily, detached dwelling unit. Prevalent single-family neighborhoods include Bear Point, Bay Circle, Terry Cove Harbor, East Orange Beach, Green Tree Road, Sampson Avenue, Marina Road, Cotton Bayou Drive, Captains Cove, Mulligan Place, Gulf Bay Road, Lauder Place, Perdido Gardens, Burkart Drive/Jackson Avenue/Look Rook, Caswell Place, Wolf Bay Terrace, the Pines, and Beaver Creek. Several single-family Planned Unit Developments are located along the beach and Canal Road.

Some common functions allowed in this category are place of worship, single-family house, duplex (conditional use), home occupation, and park.

Neighborhood parks are strongly encouraged in this category. Vacation rentals are prohibited in this land use category.

#### Residential Mixed

The Residential Mixed category provides a variety of housing types, including single-family houses on standard and non-standard lots, duplexes, townhouses, mobile homes, and low-density multi-family residential. The non-standard lot sizes for single-family houses allow for greater density than what is allowed in the Neighborhood Preservation category. There are opportunities for compatible and complimentary mixed-use centers to serve the neighborhood. Most of these developments are located along Highway 180 and the north side of Highway 182.

Life is better here

The residential mixed category also allows other conventional residential dwellings such as mobile or manufactured homes. Mobile homes are located in the Oak Ridge subdivision and in several mobile home parks in northwest Orange Beach.

Some common functions allowed in this category are single-family house, duplex, patio/garden house, townhouse, apartment building, multi-family building, mobile home, home occupation, place of worship, and park.

#### Mixed-Use, Low to Medium Intensity Residential

Lower density multi-family residential developments, restaurants, retail, mixed-use and marinas are characteristics of the Mixed-Use, Low to Medium Intensity Residential category.

Single-family houses on standard and non-standard lots and duplexes in some cases are allowed in this category.



Life is better here

Recreational vehicle resorts are another tourism attraction that may be found in this category.

Marine-based businesses, restaurants, retail, and small mixed-use centers compatible with the surrounding neighborhoods are encouraged along the back bays.

The goals of this land use category are to provide an environment with retail stores, restaurants, entertainment entities and residential dwellings in one locale and to encourage pedestrian traffic. The Wharf is an example of a mixed-use development.

Some common functions allowed in this category are single-family house, duplex, multi-family building, dry boat storage, boat repair, boat sales, restaurant, convenience store, bed and breakfast, seafood market, hotel, clothing store, souvenir store, vacation rental, office building home occupation, water recreation, marina, marina store, boat launch, place of worship, and park.

#### Commercial Center Low Intensity

The Commercial Center Low Intensity category is intended to accommodate small commercial areas that are connected and integrated into the surrounding neighborhoods. This category has a neighborhood emphasis and a limited range of retail and services.

Some common functions allowed in this category are single-family house, duplex, clothing store, art gallery, bakery, bank, beauty salon, medical clinic, medical office building, drug store, floral shop, gift shop, hobby shop, book store, professional office building, pet shop, exercise studio, art studio, place of worship, and park.

#### Commercial Center High Intensity

The Commercial Center High Intensity category provides general business areas that are important to the local tax base. Located on major arterial roadways and around major intersections, this category provides a full range of office, retail and service establishments. This category also allows some limited industrial uses.

Some common functions allowed in this category are hotel, medical clinic, medical office building, hospital, nursing home, professional office building, recreation areas, theater, drug store, automobile parts, automobile repairs, grocery store, delicatessen, bakery, gas station, bank, farmer's market, beauty salon, floral shop, dry boat storage, furniture store, storage yard, clothing store, souvenir store, building supply store, laundry facilities, restaurant, marina, car wash, pet shop, hardware store, veterinarian office, convenience store, gyms, place of worship, and park.

#### **Resort High Intensity**

Containing large mixed-use centers and high-density beachfront and multi-family residential developments, the Resort High Intensity category is an area of community-wide and regional emphasis and drives the local tourism-based economy. This category is situated along arterial roadways and near major intersections.

Condominiums outside of the 50-foot height limit area are characteristic of this category. Beachfront developments adhere to the Beach Overlay District guidelines for architecture, landscaping, and pedestrian-oriented areas. It is one of the few areas of the city



where multi-family residential developments may reach the maximum allowable density of 42 units per acre. In addition to multi-family residential, single-family houses and duplexes are also encouraged.

This category is also ideal for resort commercial uses such as restaurants and retail and mixed-use centers containing conference facilities and event venues.

Some common functions allowed in this category are single-family house, restaurant, duplex, multi-family building, professional office building, bed & breakfast, marina, hotel, beach access, vacation rental, home occupation, water recreation, clothing store, souvenir store, meeting facility, amphitheater, restaurant, delicatessen, bakery, place of worship, and park.

#### **Industrial**

This category is dedicated to limited industrial activities. Light industrial activities include processing, handling and creating products in addition to research and technological processes. Heavy industrial activities may include manufacturing, assembling, fabricating, processing, bulk handling, storing, and heavy trucking. Industrial areas in Orange Beach are located on the Gulf Intracoastal Waterway just west of the Foley Beach Express.

#### Civic Space

The Civic Space category includes government facilities, including all Federal, State, and municipal buildings and facilities; all school, education and related facilities; research center and laboratories; churches, religious institutions, and related facilities; libraries, museums, and exhibit areas for the visual and performing arts; community centers, public assembly buildings and facilities; public parks, neighborhood parks, public beach areas, and public boat launch areas; gymnasiums, stadiums, tennis courts, and ball fields; cemeteries and historical sites.

Life is better here

#### **Conservation**

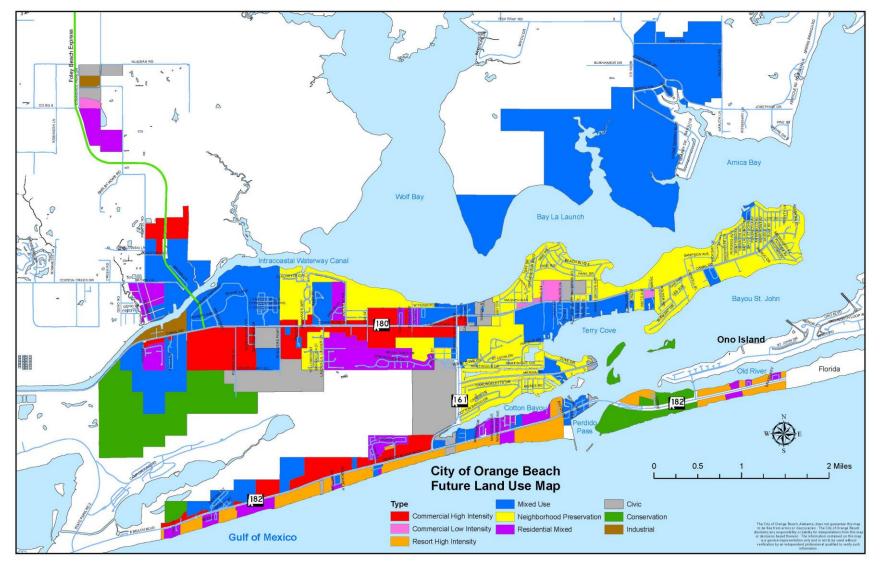
The Conservation category includes public or private lands that are not suitable for intense development due to its location and environmental characteristics. Lands in this category may include Gulf State Park properties, designated wetlands, wilderness areas, agricultural areas, and floodplains. Development is generally limited to structures that support passive recreation, conservation, or agricultural uses.

#### **Proposed Future Land Use**

Future Land Use in Orange Beach has been developed using the aforementioned Mission Statements in this section. The Future Land Use Map is a visual representation of the thrusts of these statements.



Life is better here



Source: City of Orange Beach



#### **GOAL AND RECOMMENDATIONS**

#### <u>Goal</u>

Efficiently manage and regulate land use to be consistent with the City's Mission Statement and more specifically with each District Mission Statement as set forth in this document, while protecting the natural environment, requiring habitat protection and encouraging risk-based planning for natural hazards.

#### **Recommendations**

- Ensure that all new and existing land uses will be adequately served by facilities, and that all new developments provide essential public services and facilities not committed to other development projects.
- 2. Manage future growth and development using the City's Comprehensive Plan, Zoning Ordinance, and Future Land Use Map, including revisions thereto, as a guide. The subdivision of land will be regulated subject to the City's Subdivision Regulations and the requirements for compatibility of adjacent land uses, including buffers between significantly different types of land uses as required by the Zoning Ordinance.
- 3. Continue to require, maintain and promote a safe and efficient transportation network in future developments.
- 4. Include requirements in the City's Zoning Ordinance for nonresidential land uses, as shown on the Future Land Use Map,

Life is better here

that promote economic development while protecting the City's character, neighborhoods and natural resources.

- 5. Continue to eliminate land uses inconsistent with the character of the area or the Future Land Use Map.
- 6. Preserve, protect and maintain the integrity of single-family residential neighborhoods in by restricting multi-family and commercial developments along East Canal Road and in other single-family residential neighborhood blocks.
- 7. Prohibit vacation rentals in single-family residential neighborhoods.



Life is better here

Page intentionally left blank



# Life is better here

## NATURAL RESOURCES

The City of Orange Beach is home to an abundant amount of natural resources that define the character and identity of the City. They are the foremost reasons why tourists and residents are attracted to the area.

Natural resources are considered dynamic, environmental functions that provide critical habitat, clean air and water, along with fertile soils. They are as important economically as they are ecologically by offering a variety of agriculture, aquaculture and eco-tourism opportunities that provide a competitive advantage for future economic growth and diversity.

The Environmental chapter of this Plan will examine the current inventory and assessment of the natural resources present in the community in addition to proposing recommendations and strategies for preservation and enhancement. For the purpose of the Plan, natural resources will include the City's coastal resources, water quality, soils, forests, wetlands and natural habitats and wildlife.

## **Coastal Resources**

City of Orange Beach Coastal Resources is committed to preserving and restoring the local beaches to maintain our quality of life and sustain the local tourism-based economy. The City works extremely hard protecting and maintaining our beach to ensure that our citizens and visitors can continue to have memorable and enjoyable experiences.



Source: City of Orange Beach

The Coastal Resources Department includes:

- Beach Management
- Post-disaster Recovery and Public Assistance
- Environmental and Wildlife Management
- Recreation
- Ecotourism
- Grant Management
- Program Development
- Beach Re-nourishment
- Interagency Coordination
- Environmental Policy
- Outreach and Education



### Water Quality

Life is better here

Waterfront property owners, commercial fishermen, seafood industry owners, commercial business owners, and recreational users all require access to the water. These same users have the ability to negatively impact the water to which they are attracted. The Comprehensive Plan recognizes that human access to the water can have many negative impacts on the environment. Construction of boat ramps and piers can disrupt wetlands, cause clearing of shoreline vegetation and alter the existing shoreline. Dredging to maintain access to navigable channels can result in the suspension of pollutants that have settled on the water bottoms, as well as the loss of submerged aquatic vegetation. Boat wakes may cause an increase in shoreline erosion and boating activity can result in water pollution from toxic hull paints, engine fluids and improper disposal of human waste.

Baldwin County is located within the federally designated Coastal Zone Management Area, which is managed by the Alabama Department of Conservation and Natural Resources (ADCNR) and administered by the National Oceanic and Atmospheric Administration (NOAA). The Coastal Zone Management Act (CZMA), passed in 1972, recognizes that access to clean water and healthy ecosystems supports a vibrant coastal economy and requires effectively integrated science, technology, and public policy. The goals of the CZMA are to preserve, protect, develop, enhance, and restore where possible, the coastal resources. The CZMA encourages coastal states to work in partnership with the federal government to design and enforce local programs consistent with the program.

Coordination is needed with state and federal regulatory agencies in developing regulations and educational materials that will satisfy

water access demands within the community while ensuring continued protection of the City's unique waterfront environment.

#### Point and Non-Point Source Water Pollution

Pollutants generally enter the water environment from either point or non-point sources. A point source of water pollution is a single, identifiable source of pollution, such as a pipe, sewage outlet, smoke stack, or factory. Essentially, you can "point" to the source of the pollution. These points of entry are typically easier to identify and monitor. Non-point source pollution (NPS), also called polluted runoff, are pollutants that occur over a wide area and are difficult to identify and manage. They are often associated with particular land uses and storm water runoff, as opposed to individual point source discharges. They are caused by land pollutants that enter bodies of water over large areas of land rather than at a single source point. NPS occurs when precipitation moves over and through soils, picking up and carrying away pollutants that eventually are deposited in streams, rivers, wetlands, groundwater, estuaries, and eventually the Gulf. Types of NPS include fertilizers, pesticides, animal wastes, salt from irrigation, municipal wastes, construction sediments and toxic chemicals. Fertilizers finding their way into the Gulf promote the growth of algae, triggering toxic blooms harmful to fish, shellfish, marine mammals and birds. These outbreaks can discolour water and pollute beaches. Algae blooms also deplete oxygen levels in the water, leading to further damage to marine organisms and habitats. This polluted runoff is considered to be the greatest threat to coastal waters due to the creation of oxygen-deprived dead zones in the Gulf of Mexico.



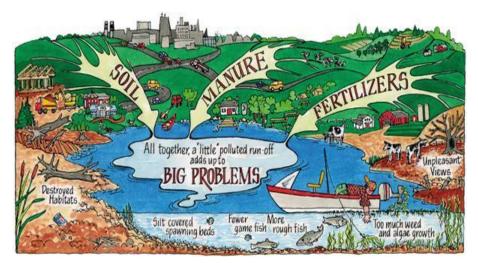
# Life is better here

#### Wetlands and Watershed Management

Wetlands provide a multitude of ecological, economic and social benefits. They provide habitat for fish, wildlife and plants, many of which have a commercial or recreational value. They are an invaluable resource providing groundwater recharge, flood mitigation, storm water runoff filtration, food and habitat for our diverse wildlife, and support of cultural and recreational activities. Wetlands also provide significant protection against storm waves and shoreline erosion through their ability to attenuate wave energy. To mitigate coastal zone flooding, these natural resources should be protected and maintained by the City of Orange Beach. The majority of wetlands within the corporate limits are classified as Estruarine, Marine, and Forested Freshwater/Shrub Wetlands.

A watershed is defined as any area of land that water flows across or through. Simply stated, all lands are considered part of a watershed. There are six (6) different watersheds inside and adjacent to the City's municipal limits. Runoff from any watershed areas north of the City will eventually drain into Wolf Bay, the Gulf of Mexico, and other adjacent waterways.

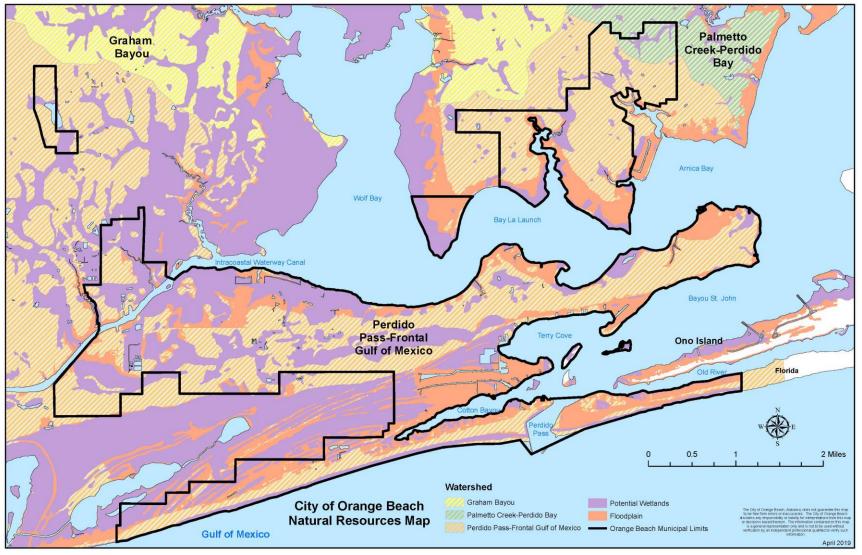
During a rainfall event, gravity causes storm water from a watershed to migrate and flow toward a common nearby body of water. Essentially, watersheds capture, store and eventually release water farther downstream. Runoff from fields, lawns, and pavement can carry potentially harmful materials from the watersheds to nearby bodies of water. It is important to consider land use activities occurring in a watershed when planning for a community's growth and development as it is virtually impossible to separate downstream effects from upstream causes. The watershed approach to planning is an understanding and appreciation of the impacts that land activities will have on other resources in and connected to the watershed. Proper land use planning can determine the health and condition of the watershed and ensure the protection of the water body it flows into.



Source: Pomperaug Watershed Coalition



Life is better here



Source: City of Orange Beach



As a city develops and converts open space and undeveloped parcels into more intensive land uses, development can have a negative effect on the watershed. The benefits of proper land use planning include the following:

- > Open and/or green space can significantly reduce the negative impacts on water quality from land development by holding and absorbing water.
- > Vegetated land cover protects water quality by reducing velocity and volume of runoff, filtering pollutants before entering groundwater and streams in conjunction with providing habitat for plants and animals.

Regulatory planning plays an important role in the protection of water resources that border a watershed. Protective measures included in subdivision and zoning regulations, can properly manage development within a city and regulate the type and intensity level of the development.

#### Storm Water Management

As development occurs in the community, the amount of impervious surface increases, as does the threat of flooding. Significant storm events, whether high intensity or long duration rainfall, can have a serious impact on the area's natural resources which is why the City has invested numerous efforts and resources in proper storm water management policies in the local land use regulations.

Our coastal community has a high probability of experiencing flooding caused by hurricanes and significant rain events. The City's location on the shoreline places the residents and the built environment at risk Life is better here

for flooding from storm surge as the subtropical climate brings heavy rainfall with the potential to cause nuisance flooding to low-lying areas.

The City of Orange Beach is dedicated to reducing the risk to life and property by effectively administering Floodplain Regulations within its corporate limits. Substantial efforts have been made to reduce non-point pollution through the creation of responsible and effective storm water management regulations that require storm water attenuation simulating the pre-development condition as well as percolation of the first flush of runoff from the site. Additionally, the City maintains Elevation Certificate information on all development within the Special Flood Hazard Area of the corporate limits which is available at the office of the Floodplain Administrator. The City has been instrumental in implementing progressive strategies in efforts to create resiliency throughout the community. Additional measures such as green landscaping methods are highly recommended for all future developments. Green landscaping is an alternative method of landscaping that allows for superior aesthetic quality of lawns or yards without using the hazardous chemicals and harmful techniques associated with some traditional landscaping practices.

#### **Special Flood Hazard Areas and Floodplain Management**

Special Flood Hazard Areas (SFHA), also referred to as the floodplain, consist of generally lowlands and relatively flat areas adjoining inland and coastal waters, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year, also referred to as the base flood or 100-year flood. SFHAs are labeled by zone based on the risk characteristics determined by the Flood Insurance



Study (FIS). The SFHAs located in the community are designated as Zones AE, VE, and AO, all of which are considered high risk zones.

Moderate flood hazard areas, labeled Zone X (shaded), are the areas between the limits of the base flood and the 0.2-percent-annualchance or 500-year flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone X (unshaded).

As a beach community, Orange Beach's position on the shoreline places its citizens and the built environment at risk for flooding not only from the Gulf of Mexico but also from our bays, canal systems, and abundant tidally influenced wetlands. Coastal flooding occurs when normally dry, low-lying land is flooded by seawater. The extent of coastal flooding is a function of the elevation that inland flood waters penetrate. This flood inundation is controlled by the topography of the coastal land exposed to flooding. Storms, including hurricanes and tropical cyclones, can cause flooding through storm surges which are waves significantly larger than normal. If a storm event coincides with the high astronomical tide, extensive flooding can occur. Flash flooding is a local flood of short duration generally resulting from heavy rainfall that exceeds the capacity of the drainage infrastructure. This type of flooding is also a significant risk in Orange Beach due to the relatively low elevations and flat topography of the island.

Flooding can destroy coastal habitats such as coastal wetlands and estuaries and can erode dune systems. These places are characterized by their high biological diversity therefore coastal flooding can cause significant biodiversity loss. In addition to this, these coastal features are the coast's natural buffering system against storm waves; consistent coastal flooding and sea level rise can cause this natural protection to be reduced allowing waves to penetrate greater distances inland exacerbating erosion and furthering coastal flooding. The coastline does provide natural protective structures to guard against flooding.

Life is better here

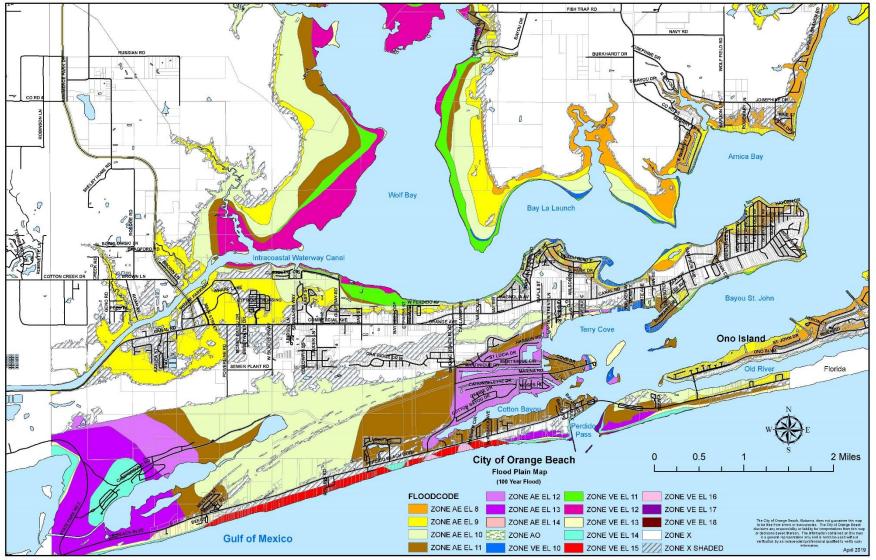
These include physical features like sand dune systems, but also ecosystems such as marshes and mangrove stands that have a buffering function.

The City of Orange Beach currently employs six Certified Floodplain Managers within the Community Development Department to administer the floodplain management regulations for development within the municipality and to provide information on flood risk to the community. Orange Beach participates in the National Flood Insurance Program (NFIP) and the Community Rating System (CRS) as a Class 7 community.

As coastal flooding is typically a natural process, it is inherently difficult to prevent flood occurrence. When our community is affected by flooding, an adaption to how we operate through behavioral and institutional changes is often required in order to mitigate potential losses. Building regulations, coastal hazard mitigation planning, urban development planning, spreading the risk through insurance and enhancing public awareness are examples of how this is achieved in Orange Beach through the floodplain management programs.



Life is better here



Source: City of Orange Beach



# Life is better here

## Living Shorelines and Sea Grass Bed Conservation

Living shorelines are highly encouraged in efforts to make Orange Beach more resilient to storms and other natural disasters, and less susceptible to erosion. They increase ecological functions within coastal and marine environments and provide benefits that include: water quality improvements, sediment movement, aquatic habitats, and plant communities. Living shorelines are the preferred alternative to bulkheads since bulkheads generally increase the rate of coastal erosion whereas living shorelines do not. Living shorelines provide a natural bank for long-term protection as opposed to bulkheads, revetment, and concrete seawalls. This approach uses plants, sand, and limited use of rock to provide shoreline protection and maintain valuable habitat. Highly productive marine ecosystems such as oyster reefs, emergent saltmarsh, and submerged aquatic vegetation receive substantial health benefits due to living shorelines. Submerged seagrass beds play a crucial role in the coastal environment, including nursery habitat for estuarine fisheries, major sources of organic biomass for marine food webs, effective natural agents for soil stabilization and nutrient cycling, and improved water quality. Seagrasses are highly susceptible to boat traffic and prop damage, altered hydrology, dredging, non-point source pollution, and other anthropogenic disturbances. Public education and awareness is needed to ensure the protection and conservation of this critical habitat. The City is currently involved with the Islands of Perdido Foundation in restoration and conservation projects. While these efforts are making substantial improvements, it is highly encouraged that the City continue to work with the Foundation to ensure all area water bodies are included in conservation practices and strategies.

### **Beach and Dune Protection**

Beach and dune protection is extremely important along the Alabama Gulf Coast, particularly in areas experiencing shoreline erosion and concentrated urban development. The growth of mainland coastal population centers and the increasing development and recreational use of the coastline can impact the stability of the beach and dune environment.



Source: City of Orange Beach

Construction and heavy recreational use of the beaches can contribute to fragmentation of the beach/dune system and deterioration of dunes. The vegetation that secures sand is destroyed, sand is lost, and the dune line is breached by roads, trails, and storm runoff. Dune damage that results from human activities accelerates the damage caused by wind and wave erosion. Inland areas become more vulnerable to hurricanes and tropical storms when the dune line is weakened, resulting in a greater chance for flooding.



Dunes are characterized by their high biological diversity therefore coastal flooding can cause significant biodiversity loss. In addition to this, these coastal features are the coast's natural buffering system against storm waves; consistent coastal flooding and sea level rise can cause this natural protection to be reduced allowing waves to penetrate greater distances inland exacerbating erosion and furthering coastal flooding. Protecting dunes and natural beaches helps prevent loss of life and property during storms and safeguards the sand supply that slows shoreline erosion. In addition to creating a more resilient community, protecting dunes and beaches also preserves and enhances the beauty of the coast and coastal ecosystems, which provide critical habitat for nesting sea turtles each year.

The City has been active in the past in participating in beach renourishment projects and should continue these efforts into the future. The most recent project restored roughly 2.2 million cubic yards of sand lost from several hurricanes and was one of the largest beach re-nourishment projects in the country.

#### Wildlife & Habitat

The beaches and surrounding waters of Orange Beach provide critical habitat for a plethora of wildlife and endangered species. Our pristine environment serves as the perfect home for more than 4,500 different species. Of those, 144 can only be found in the state of Alabama and another 100 are deemed globally rare. The Alabama Beach Mouse, the West Indian Manatee, and the Loggerhead Sea Turtle are among some of the endangered and threatened species found in coastal Alabama.

# Life is better here

The City of Orange Beach Coastal Resources Department works with state and federal agencies to address the many wildlife issues of our growing community. Protection and management efforts have been implemented to ensure the City is taking a proactive approach to create a diversified wildlife management program.



Source: al.com

The City is home to one of the last remaining intact maritime forests along coastal Alabama. In addition to being a preserve for many of the area's native wildlife, this remnant natural area serves as a lifeline for millions of migratory birds each spring and fall by providing essential food and shelter resources. This habitat provides an abundance of natural features and a variety of diverse coastal habitats representative of the maritime forest including sandy oak hammocks,



longleaf sand ridge, freshwater marsh, pine flatwoods, relict dune swales, seepage swamps and a pitcher plant bogs.



Source: US Fish & Wildlife Service

## Sea Level Rise

Relative sea-level rise refers to the long-term average of the sea-level rise, apart from the daily changes of the tides and relative to the local land level. Since at least the start of the 20th century, the average global sea level has been rising.

Higher sea levels translate to more frequent and higher coastal floods. Sea level rise is occurring in Alabama, making the state more vulnerable to flooding and other major environmental issues. Higher sea levels create a higher launching point for storm surge. These small changes in sea level rise are enough to turn what were 100-year storm surges into much more frequent events. Slightly higher sea levels

Life is better here

cause an increase in hurricane and tropical storm damage potential make hurricanes even more damaging. Just a few more inches of sea level rise allow a hurricane to push more water onto the land.

Projecting future sea level is challenging, due to the complexity of many aspects of the climate system. As climate research leads to improved computer models, projections have consistently increased. Preparing for the impacts of sea level rise through climate adaptation planning is essential for coastal communities. Staff from the Orange Beach Community Development Department participates in the Climate Community of Practice, a group of professionals formed bv The National Oceanic and Atmospheric Administration's Gulf of Mexico Regional Collaboration Team and the four Gulf of Mexico Sea Grant Programs, who aim to incorporate adaptation strategies into Gulf Coast communities' comprehensive plans and enhance the resilience of Gulf Coast communities.

## **Robinson Island Estuary**

Under threat of commercial development, Robinson Island was purchased by the City of Orange Beach in 2003. The purchase assured the preservation of natural plant and animal life, as well as the use of the island for recreational purposes by residents and tourists alike.

Robinson Island and the neighboring Bird Island have been combined as a park, creating a more easily managed estuary. The City has established laws to protect native flora and fauna of the estuary. Since the purchase, Robinson Island has continued to grow in popularity among boaters and tourists alike.



Life is better here



Source: City of Orange Beach



Life is better here

#### **GOAL AND RECOMMENDATIONS**

Goal

Maintain the environmental integrity of Orange Beach

#### **Recommendations**

- 1. Amend the stormwater management regulations to encourage protective measures for the area's watersheds and incorporate low impact development (LID) methods, which include green infrastructure and design standards.
- 2. Continue to promote public awareness of responsible environmental and wildlife stewardship.
- 3. Create additional public water access points and parking facilities throughout the community.
- 4. Support "Living Shorelines" development practices along waterways to control erosion and mitigate flooding.
- 5. Continue and expand upon beach restoration programs to build additional beach and provide shoreline stabilization.
- 6. Continue to provide educational signage throughout the community to promote public awareness to the area's environmentally and ecologically sensitive areas.
- 7. Continue to enhance a comprehensive landscaping plan, water quality plan, wetland conservation plan, and wildlife rescue and management plan.
- 8. Continue to develop eco-tourism opportunities throughout the area.



## POPULATION AND ECONOMY

The purpose of this section is to provide an overview of the present and future population and economy of Orange Beach.

#### **Population**

The 2013-2017 American Community Survey from the U.S. Census Bureau shows Orange Beach having a population of 5,826 persons. This represents a 7.1 percent increase from the 2010 recorded population of 5,441 persons.

Population projections are important for planning for future growth and meeting the needs of future residents. Due to its tourism-based economy, Orange Beach has a unique population encompassing a permanent population as recorded by the U.S. Census Bureau and a seasonal population. The permanent and seasonal populations affect the area with regard to traffic and public facilities and services. Therefore, it is imperative to look at how both populations may change over the next 20 years.

#### Projections – Permanent Population

Permanent population projections for Orange Beach were estimated using two methods.

*Method 1*: The first method used average growth rate to estimate future permanent population growth. This figure was obtained by calculating the average rate of change over a specified time period. Based on data from the U.S. Census Bureau, the population of Orange

Beach increased 7.1 percent between 2010 and 2017. During the seven-year period, Orange Beach had an average yearly increase of more than 1 percent.

Life is better here

*Method 2*: The second method calculated the City's population as a percentage of the county's population and then applied that percentage to the county's population projections.

According to the U.S. Census Bureau, the population of Orange Beach in 2010 and 2017 comprised 3 percent and 2.9 percent of Baldwin County's population, respectively, for an average of 2.95 percent.

The Center for Business and Economic Research (CBER) at the University of Alabama has population projections for Baldwin County from 2020 to 2040. To determine permanent population projections for Orange Beach, the average percentage (2.95 percent) can be applied to the county's projections in the following table.

Projected Population of Baldwin County by Year,					
2020 to 2040					
2020	2025	2030	2035	2040	
222,554 242,345 261,777 281,200 300,899					

Source: Center for Business and Economic Research

The following table shows the two aforementioned methods being applied to determine the permanent population projections for Orange Beach. The second method yielded the highest population increase for Orange Beach, while the first method yielded the most



conservative population increase. The true projection is probably an average between the two methods.

### Permanent Population Projections, 2020 to 2040

Method 1: Average Growth Rate						
2020 2025 2030 2035	2040					
<b>6,001</b> 6,301 6,616 6,947	7,294					
Method 2: Percentage of Baldwin County 's Population						
2020 2025 2030 2035	2040					
<b>6,565</b> 7,149 7,722 8,295	8,877					
Average of Two Projection Methods						
2020 2025 2030 2035	2040					
<b>6,283</b> 6,725 7,169 7,621	8,086					

Source: Calculations by SARPC

#### Projections – Seasonal Population

The seasonal population in Orange Beach will fluctuate monthly, depending on the season and types of visitors.

The Alabama Gulf Coast Convention & Visitors Bureau maintains an accommodations inventory of existing condominium units and hotel/motel lodging rooms. To determine the monthly seasonal population, an assumed average person per unit was applied to the total number of occupied units during the month. To calculate the total population (seasonal and permanent), the derived seasonal population for each month was added to the 2017 American Community Survey permanent population (5,826 persons).

### Permanent and Seasonal Population Estimates in Orange Beach November 2017 – October 2018

	Total	Average		
	Occupied	Person per	Seasonal	Total
	Units	Unit	Population	Population
January	4,695	2	9,390	15,216
February	7,129	2	14,258	20,084
March	5,679	3	17,036	22,862
April	3,673	3	11,018	16,844
May	4,845	3	14,535	20,361
June	7,771	3.5	27,199	33,025
July	8,476	3.5	29,666	35,492
August	5,210	3.5	18,235	24,061
September	4,648	3	13,943	19,769
October	5,229	3	15,688	21,514
November	2,386	3	7,157	12,983
December	2,009	2	4,017	9,843
AVERAGE			15,179	21,005

Source: Alabama Gulf Coast Convention & Visitors Bureau, Inntopia, Smith Travel Research, Calculations by SARPC

#### North of Intracoastal Waterway

The previously discussed population estimates do not take into account undeveloped areas presently within Orange Beach north of the Intracoastal Waterway and future annexations in this area.



Orange Beach has annexed areas north of the Intracoastal Waterway along the Foley Beach Express and east of Wolf Bay. The maximum density of multi-family residential projects is determined based on building height per the zoning ordinance.

There are 2,185 acres north of the Intracoastal Waterway with residential development potential. These acres are zoned Agricultural (AG), General Business (GB), Marine Resort (MR), Multi-Family Residential Low Density (RM-1), Planned Unit Development (PUD), and Annexed – To Be Determined (A-TBD).

There are 19 acres zoned Agricultural. Article 4 of the Zoning Ordinance limits this zoning district to single-family dwellings. Based on the maximum density of 4.84 lots per acre, 91 single-family residential lots would be allowable.

There are 40 acres zoned Multi-Family Residential Low Density and roughly 225 acres zoned Marine Resort. For multi-family residential developments, Article 4 of the Zoning Ordinance limits the building height to 50 feet or 5 stories. Based on the maximum density of 35 units per acre, the allowable dwellings in these two zoning districts would be 9,275 units.

The remaining 1,901 acres are zoned General Business, Planned Unit Development, and Annexed – To Be Determined. Multi-family residential developments north of the Intracoastal Waterway are allowed to have a building height of 140 feet or 14 stories, whichever is less, and are limited to the maximum density of 42 units per acre. The allowable multi-family residential dwellings in these zoning districts would be 79,842 units. Life is better here

The Planned Unit Development and Annexed – To De Determined parcels (1,794 acres combined) could be developed as single-family residential areas. Based on a maximum density of 4.84 lots per acre, the build-out potential would be 8,682 single-family residential lots.

### **Demographics**

The median age in Orange Beach is 51.3 years, making Orange Beach's population older than that of Baldwin County, which has a median age of 42.3 years, and Alabama, which has a median age of 39 years. The median age in Orange Beach is an increase from the median age of 45.5 years that was reported in the 2010 U.S. Census.

As of 2017, Orange Beach has a significant percentage of the population that is 65 years of age and older at 30.5 percent, which is higher than the same aged population of both Baldwin County and Alabama at 19.9 percent and 16.5 percent, respectively. The older population percentage in Orange Beach represents a substantial increase from the 19.17 percent that was reported in the 2010 U.S. Census.

The proportion of the population between 19 and 64 years of age in Orange Beach is 54 percent and is lower than that of Baldwin County at 58.3 percent and Alabama at 61 percent. This age category is generally considered as the most economically productive age group.

With regard to the population under 18 years, 15.5 percent of Orange Beach's population is in this age category compared to 21.8 percent for Baldwin County and 22.5 percent for Alabama. The current percentage represents a decrease from the 18.7 percent reported in the 2010 U.S. Census.



The following table presents the demographic information for Orange Beach according to the 2013-2017 American Community Survey.

#### Population Demographics in Orange Beach, 2017

Median Age		51.3
Percentage of Total Population	Male	52.4%
by Sex:	Female	47.6%
Percentage of Total Population	White	96.6%
by Race:	African American	0.7%
	Asian	0.2%
	Hispanic or Latino	1.7%
	Two or More	2.4%
	Races	
Average Number of Persons Per	2.25	
Percentage of Population under	15.5%	
Percentage of Population 65 Yea	ars of Age and Older	30.5%

Source: 2013-2017 American Community Survey, Data USA

## **Economy**

Like most communities along the Gulf Coast, Orange Beach has a tourism-based economy. The general health of the local economy is a key determinant of the rate at which land will be utilized for either commercial or residential development to support the labor force of the economy.

# Life is better here

#### Labor Force and Income

As of 2017, the population of Orange Beach 16 years of age and older is 4,968 persons, of which 2,883 persons or 58 percent are in the civilian labor force. None were reported in the armed forces. In this age group, 42 percent is not in the civilian labor force, which is likely attributed to the percentage of the local population under 18 years of age and 65 years of age and older.

Of the total persons in the civilian labor force, 166 persons are unemployed, giving Orange Beach a low unemployment rate of 5.8 percent.

Civilian Labor Force in Orange Beach, 2017					
Population 16 Years and Older	4,968	100%			
Population 16 Years and Older in Labor Force	2,883	58%			
Population 16 Years and Older Not in Labor Force	2,085	42%			
Civilian Labor Force	2,883	100%			
Employed	2,717	94.2%			
Unemployed	166	5.8%			
Armed Forces		0			

Source: 2013-2017 American Community Survey 5-Year Estimate

Educational attainment is an indicator of the skill level of the local labor force. As of 2017, Orange Beach has a population of 4,674 persons age 25 and older. Of this population, 92.4 percent have a high school diploma or higher and 43.7 percent have a bachelor's degree or higher. The proportion of the population age 25 years and older with bachelor's degree or higher is considerably more than that



Life is better here

of Baldwin County at 30.7 percent and Alabama at 24.5 percent. More than 11 percent of Orange Beach's population 25 years and older have earned a graduate or professional degree. According to the U.S. Census Bureau, the per capital income of Orange Beach has increased since 2010. In 2010, the per capita income was \$40,153. In 2017, the per capita income was \$43,193, representing a 7.6 percent increase in seven years. The median household income was \$66,656 in 2010 and \$69,388 in 2017.

In 2017, the per capita income and median household income for Orange Beach were higher when compared to that of neighboring cities of Foley and Gulf Shores and Baldwin County and Alabama as a whole.

Income	Level	Comparison,	2017
--------	-------	-------------	------

	Orange		Gulf	Baldwin	
	Beach	Foley	Shores	County	Alabama
Per Capita	\$43,193	\$25,920	\$38,449	\$29,364	\$25,746
Income					
Median	\$69,388	\$42,468	\$50,227	\$52,562	\$46,472
Household					
Income					

Source: 2013-2017 American Community Survey

Of the total population in Orange Beach in 2017, 7.6 percent are living below the poverty level, in comparison to 10.1 percent in Baldwin County and 16.9 percent statewide in Alabama.

## **Employment Characteristics**

When Orange Beach was first settled, logging and pine sap collecting were the early industries. Until the mid-1800s, farming and fishing sustained the sparsely populated area. After the Civil War, the community grew for the next 70 years with commercial and sport fishing being the main industries.

After Hurricane Frederic struck the Alabama Gulf Coast in September 1979, the condominium-building boom that followed thereafter transformed Orange Beach into a resort community with tourism joining charter fishing as an integral part of the City's economy.

In 2017, more than 60 percent of the Orange Beach civilian labor force were employed in the following industries:

- Arts, Entertainment and Recreation
- Accommodations
- Food Services
- Finance and Insurance
- Real Estate
- Rental and Leasing
- Education Services
- Health Care
- Social Assistance
- Retail Trade

Since the previous Comprehensive Plan in 2006, most industries have seen an increase in civilian labor force participation between 2003



and 2017. Public Administration was the industry with the biggest increase during this time period at 167.4 percent. Education Services, and Health Care & Social Assistance industries were second with an increase at 158.1 percent. The increase may be attributed to the growth of Columbia Southern University as a major employer in Orange Beach. Finance & Insurance and Real Estate & Rental & Leasing industries were third with an increase at 152.3 percent. The only industry with a decrease during this period was Construction at 54.5 percent.

Orange Beach Civilian Employment by Industry, 2003 to 2017					
	2003		2017		Change
Industry	No.	%	No.	%	
Agriculture, Forestry,	17	0.81	23	0.85	+35.3%
Fishing, Hunting &					
Mining					
Construction	356	17.03	162	5.96	-54.5%
Manufacturing	93	4.45	119	4.38	+28.0%
Wholesale Trade	55	2.6%	60	2.21	+9.1%
Retail Trade	332	15.89	376	13.84	+13.3%
Transportation,	97	4.64	165	6.07	+70.1%
Warehousing & Utilities					
Information	44	2.11	47	1.73	+6.8%
Finance & Insurance,	174	8.33	439	16.16	+152.3%
and Real Estate &					
Rental & Leasing					
Professional, Scientific	213	10.19	220	8.10	+3.3%
& Management					
Services, Administrative					
& Waste Management					
Services					

Life	is	better	here
------	----	--------	------

Education Services, Health Care and Social Assistance	160	7.66	413	15.20	+158.1%
Arts, Entertainment, Recreation, and Accommodations & Food Services	395	18.90	452	16.64	+14.4%
Other (except Public Administration)	108	5.17	118	4.34	+9.3%
Public Administration	46	2.20	123	4.53	+167.4%

Source: 2013-2017 American Community Survey, 2007-2020 Orange Beach Community Preservation and Growth Management Plan

## **GOAL AND RECOMMENDATIONS**

## Goal

Promote desirable residential environments while encouraging sound economic growth.

## **Recommendations**

- 1. Maintain the quality of life that is currently enjoyed by the residents to ensure that Orange Beach remains a desired residential and tourist community.
- 2. Continue to maintain and promote Orange Beach brand as a family-friendly multifaceted recreational community.



Life is better here

# HOUSING

The purpose of this section is to give guidance to the private sector in providing an adequate housing supply for the existing and projected population, and to the public sector to ensure that land use controls allow for future permanent year-round and seasonal housing needs.

#### **Inventory**

Housing Units	12,602	
Resident Units	2,646	21%
Non-Resident Units	9,956	79%

#### Units in Structure

Single family	3,214	25.5%
Mobile Homes	403	3.2%
2-4 Units	290	2.3%
5 - 19	567	4.5%
20 or more	8,128	64.5%

Source: American Community Survey Estimates, 2017, Orange Beach 2018, SARPC Calculations

#### **Housing Tenure**

According to the American Community Survey Estimates, in 2017 approximately 68% of the occupied housing units were owner-occupied and 32% were renter-occupied.









Life is better here

#### **Housing Values**

The 2017 American Community Survey estimates that the median value of owner-occupied housing units is \$256,600.

### **GOAL AND RECOMMENDATIONS**

#### <u>Goal</u>

Encourage the availability of an adequate supply of housing to meet all residential needs of the City of Orange Beach.

#### **Recommendations**

- 1. Continue code enforcement programs to eliminate substandard housing conditions and ensure neighborhood integrity.
- 2. Continue to restrict vacation rental in single-family neighborhoods.
- 3. Monitor the parking needs for all housing types and amend the zoning ordinance accordingly.
- 4. Continue to provide incentives to construct "Fortified Homes".



# TRANSPORTATION

The purpose of the Transportation Section is to plan for future motorized and non-motorized transportation systems. An essential basis for planning transportation systems is the current and proposed land use that directly impacts the roadway facilities.

#### <u>Analysis</u>

The City of Orange Beach has primarily developed along an east-west axis. Alabama Highways 180, the northern roadway, and 182, to the south, serve as the major east-west traffic thoroughfares for the community. The only north-south access is provided by Alabama Highway 161.

Limited evacuation corridors plague the City. With the continuous residential and commercial development and the overall increase in tourism along the Gulf Coast, the City's limited access to the mainland poses a potentially serious situation for hurricane preparedness and a remedy for this critical deficiency is a high priority.

In 2007, the City adopted a Transportation Master Plan Update prepared by Carter & Burgess and in 2017, a Transit Feasibility Study was conducted. The Plan and Study are used in part, as a basis for this section.

### **Functional Classification**

The functional classification system separates, divides, or groups streets by a hierarchical system based on street function.

The roadway network consists primarily of three types of roadway classifications – arterials, collectors and local streets. The arterial network consists of the three main roadways within the city – Canal Road (AL 180), Orange Beach Boulevard (AL 161), and Perdido Beach Boulevard (AL 182).

Life is better here

### **Traffic Volumes**

The Alabama Department of Transportation (ALDOT) conducts traffic counts on an annual basis at several locations along the three major roadways within the City. Traffic counts are presented in Annual Average Daily Traffic (AADT), which is the average amount of traffic along the road adjusted for time of year and day of week.

Forecast conditions for the transportation network are tied to current traffic trends and projected forward. Current traffic conditions are described as level of service (LOS) A, B, C, D, E, or F. This system of describing traffic conditions is hierarchical, with LOS A being best and descending to LOS F as traffic conditions deteriorate. Service levels A through D are determined to be acceptable in an urban environment. It must be noted at this time the LOS described are for urbanized areas, therefore, Orange Beach residents may not have the ability to tolerate LOS less than A or B.

Coastal areas experience traffic flow patterns different from other areas. Typically, the AM peak hour is less congested than the PM peak hour as recreational commercial uses are relatively minimal until late morning. The primary peak times of congestion are exhibited on the arterials prior to and following weekends and holidays due to tourist traffic coming onto and leaving the island. This is especially true



Life is better here

during the spring break and summer seasons. Traffic volumes are generally at their greatest between noon and 6 PM.

Perdido Beach Boulevard has been reconstructed as a limited access roadway from the Romar Beach access to east of the Orange Beach Boulevard intersection. A second Canal Road eastbound lane has been constructed between the Foley Beach Express and William Silvers Parkway and a westbound lane between Orange Beach Boulevard and the Wharf. In 2019, the State will be constructing an eastbound lane from William Silvers Parkway to Orange Beach Boulevard, effectively causing Canal Road to be a five-lane thoroughfare along its busiest segment. The City will be widening Canal Road to three lanes from the Orange Beach Boulevard intersection to Wilson Boulevard. Completion is anticipated to be in the spring of 2021.

### Level of Service

The Level of Service was determined using the MATS Model Capacities by Functional Class, Average Daily Traffic, Both Directions.

# **Summary**

# Principal Arterial

Alabama Highway 182, also known as Perdido Beach Boulevard, is the only principal arterial and travels along the beach. This roadway is operating at a LOS A and B west of Alabama Highway 161 but drops to a LOS D and C east of Highway 161. The recent improvements to this roadway are anticipated to increase the LOS.

# Minor Arterials

Alabama Highway 161, also known as Orange Beach Boulevard, the sole north-south minor arterial, provides primary access to the commercial, residential and public land uses. The roadway is operating at a LOS B and C and could decline if more development occurs.

Alabama Highway 180, also known as Canal Road, is a minor arterial serving both Orange Beach and Gulf Shores. Canal Road west of Alabama Highway 161 serves as the main northern street of Orange Beach and is the primary access for commercial land use and is functioning at a level of service of A and C.

# Major Collector

Canal Road east of Alabama Highway 161 serves as the sole route extending to Bear Point and the northern peninsula of Orange Beach, abutting various types of residential and commercial land uses and is functioning at a level of service A.

# Local Streets

Local streets serve residential areas and vary in condition from paved, adequately lit and well-drained to unpaved, unlit and lacking drainage infrastructure. The acquisition of additional right-of-way, widening of narrow streets, and improvement of drainage infrastructure are the primary needs of Orange Beach's local streets.



#### Average Daily Traffic Count **Orange Beach** 2018 Traffic Station Map LOS Number No. Count 845 1. 17,306 Α 2. 592 23,359 В 3. 828 С 29,075 4. 505 16,026 Α 5. 6011 16,026 Ε 6. 1237 24.880 С 7. 512 26,123 D 511 8. 8,113 D 9. 593 D 18.630 10. 1010 10,094 В 11. 510 12.183 Ε

Source: Alabama Department of Transportation Traffic Count Maps 2018 and SARPC

### <u>Sidewalks</u>

The Subdivision Regulations require all new subdivisions to have sidewalks. The required width is a minimum of five feet.

Orange Beach Boulevard presently has sidewalks on both sides of the roadway from Canal Road southward to Perdido Beach Boulevard. The sidewalk on the east side of the roadway has a connection to the Cotton Bayou public boat launch area located on No Wake Road.

Life is better here

Canal Road, east of Orange Beach Boulevard, has a sidewalk on the north side of the roadway. This sidewalk begins at the Callaway Drive intersection and runs eastward to Bear Point, terminating near the entrance to the Perdido Gate Subdivision. This Canal Road sidewalk has connectivity to the Orange Beach Boulevard sidewalk via Callaway Drive and the Orange Beach Justice Center.

Sidewalk connectivity to the Orange Beach sportsplex and proposed new Middle and High School site is provided to neighborhoods located on Orange Beach Boulevard and Canal Road East via an east-west sidewalk located on West Oakridge Drive and the northern edge of the Gulf State Park. This sidewalk also connects to the southern end of the Lauder Place subdivision sidewalk located on Lauder Lane.

See Master Sidewalk Plan Map.

# Bike Paths

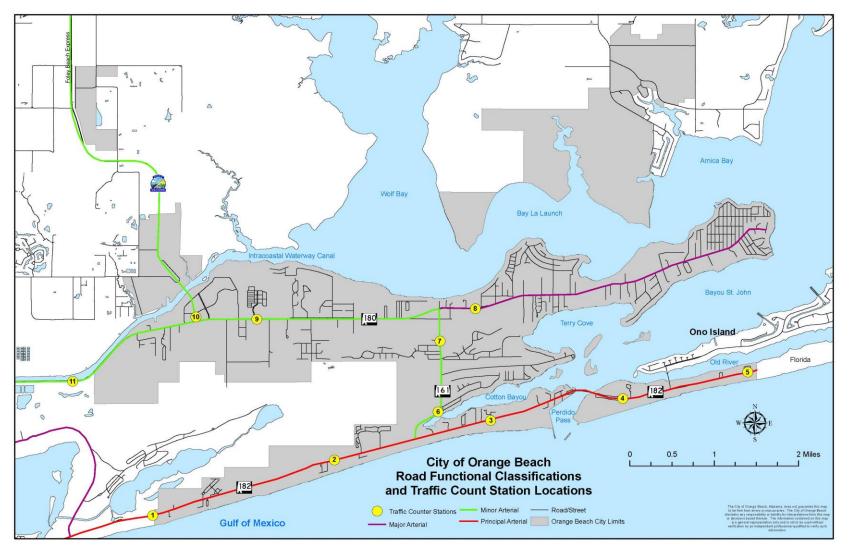
There are no provisions in the Subdivision Regulations for bike paths.

Perdido Beach Boulevard (AL 182) has designated and marked bike and pedestrian pathways along the eastbound and westbound lanes in Orange Beach. Orange Beach Boulevard has sufficient shoulder width to serve as a bike path but is not delineated. The Orange Beach Boulevard sidewalks have adequate width to accommodate bike and pedestrian traffic. Canal Road, east of Orange Beach Boulevard, has 3-foot paved shoulders, but like Orange Beach Boulevard, bicyclists generally use the north side sidewalk. There are no bike paths on Canal Road west of Orange Beach Boulevard.



CITY OF ORANGE BEACH COMMUNITY PRESERVATION AND GROWTH MANAGEMENT PLAN TRANSPORTATION

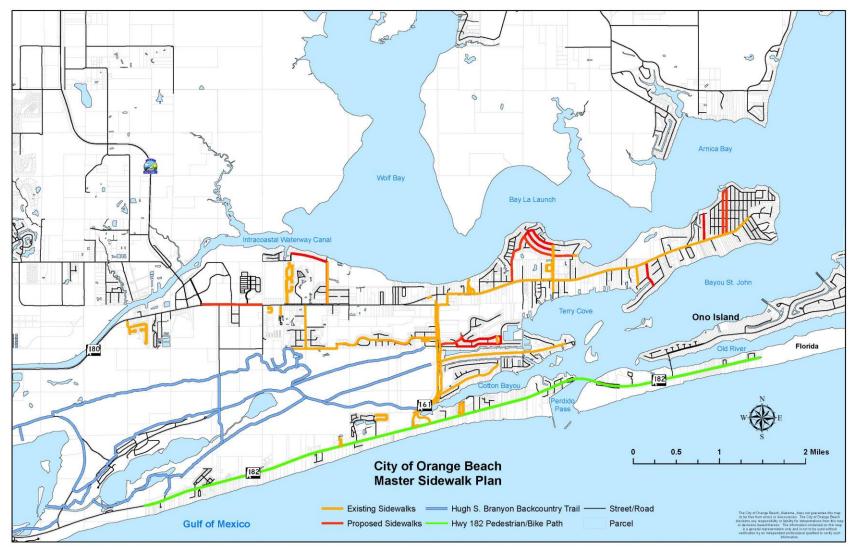
Life is better here





CITY OF ORANGE BEACH COMMUNITY PRESERVATION AND GROWTH MANAGEMENT PLAN TRANSPORTATION

Life is better here





Life is better here

There are fifteen miles of the Gulf State Park Backcountry Trail, a multimodal path that provides connectivity between five trailheads located at the sportsplex and along Orange Beach Boulevard and Perdido Beach Boulevard.

See Backcountry trail map.

#### Roadway Connectivity

Roadway connectivity is essential to relieve pressures on severely overburdened facilities by re-routing traffic to alternative thoroughfares. Connectivity of roadways in Orange Beach is severely limited by its physical geography of wetlands, bodies of water and the Gulf State Park. As such, there are only three through routes – Canal Road, Perdido Beach Boulevard and Orange Beach Boulevard.

### Transit

### Baldwin Regional Area Transit System

The existing public transportation system is the Baldwin Regional Area Transit System (BRATS). Currently Brats offers Dial-A-Ride, commuter routes, and health care routes. BRATS has contracts with several local Social Service Agencies to provide transportation to individuals with mental and physical disabilities and connect citizens to local educational facilities. The BRATS Ride to Work Program provides commuter routes for employees of various local businesses and fast food restaurants.

# Transit Feasibility Study

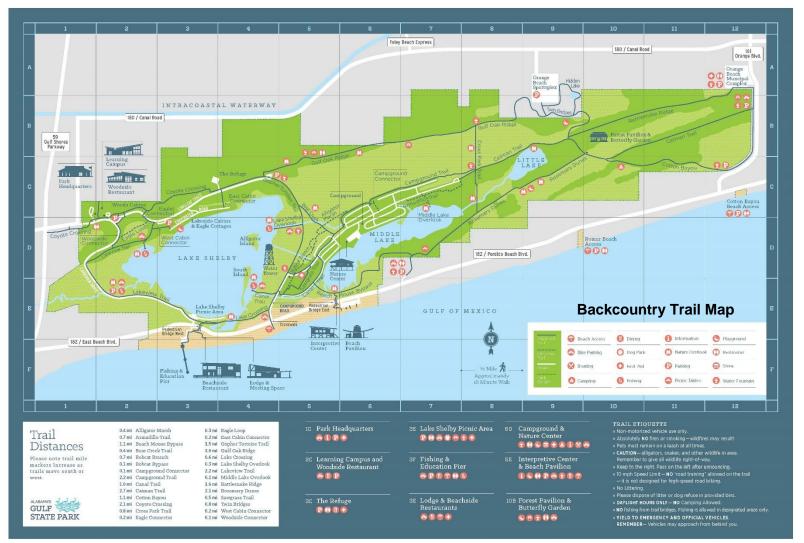
In March 2017, a transit feasibility study was prepared and presented by ATKINS to the Florida-Alabama Transportation Planning Organization for the City of Orange Beach.

In summary it was determined that tourists would be the major source of ridership for a new beach service transit system. The primary ridership support for transit was along Perdido Beach Boulevard. The study revealed that the transit service would not alleviate the primary cause of traffic congestion; tourists coming onto and leaving the island and travelling to their beach destination. The costs of the proposed transit system far outweighed the benefits and the initiative was abandoned.



CITY OF ORANGE BEACH COMMUNITY PRESERVATION AND GROWTH MANAGEMENT PLAN TRANSPORTATION

Life is better here



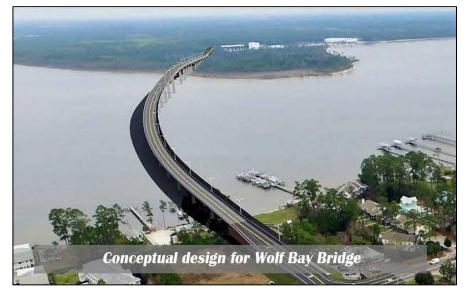
Source: Gulf State Park



Life is better here

# **Future Transportation Network**

With Orange Beach continuing to be an ever-increasing resort destination, transportation deficiencies will continue to pose challenges for the City and State. Transportation network improvements that include multi-modal means of transportation will promote a pedestrian-oriented lifestyle, while lessening dependency on the automobile. The Future Transportation Map is found on the following page.

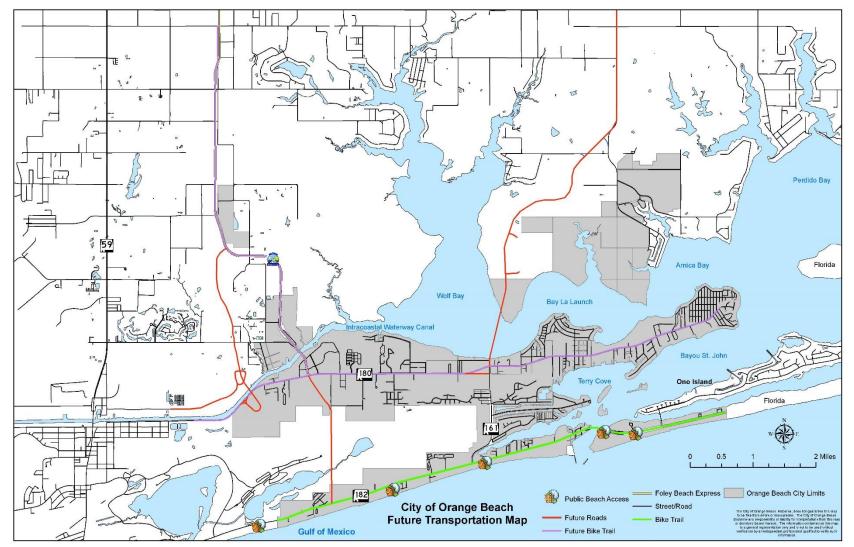


Source: ALDOT



CITY OF ORANGE BEACH COMMUNITY PRESERVATION AND GROWTH MANAGEMENT PLAN TRANSPORTATION

Life is better here





# **GOAL AND RECOMMENDATIONS**

# <u>Goal</u>

Provide a safe and efficient transportation system for all residents and visitors, creating a pedestrian oriented environment and creating some form of public transit to lessen dependence on the automobile.

#### **Recommendations**

- 1. Construct the Cross-Island Parkway in the location of Powerline Road, connecting the Foley Beach Express to Perdido Beach Boulevard.
- 2. Construct the Canal Road By-Pass along the Orange Avenue right-of-way, south of the Commons Retail Shopping Center.
- 3. Construct the Wolf Bay Bridge connecting Orange Beach Boulevard to Sapling Point, north of the Gulf Intracoastal Waterway.
- 4. Improve the Orange Beach Boulevard and Canal Road intersection.
- 5. Complete the County Road 83 extension from I-10 to I-65.
- 6. Construct a multi-modal sidewalk along Canal Road from Callaway Drive to the Beaver Creek subdivision.
- 7. Acquire land from Perdido Beach Boulevard property owners for the construction of multi-modal sidewalks on both sides of the roadway.
- 8. Replace street lights with decorative pedestrian-scale street lights and install additional street lights as needed.

Life is better here

- 9. Use classic Traditional Neighborhood Design (TND) in the area north of the Gulf Intracoastal Waterway. The streets should be developed using grid patterns, limiting the use of cul-desacs and using Complete Streets concepts. Each development is intended to connect with future or existing adjacent developments.
- 10. Implement Complete Streets Guidelines for all municipal streets, where possible.
- 11. Continue to work with the State to minimize ingress/egress points along Canal Road, Orange Beach Boulevard and Perdido Beach Boulevard.
- 12. Continue to enhance street, bridge and gateway beautification.
- 13. Develop a directional sign plan.
- 14. Expand public parking at beach accesses.
- 15. Continue to investigate a park and ride system.



# COMMUNITY FACILITIES AND SERVICES

The purpose of this chapter is to provide an overview of facilities and services the City provides.

#### Fire Protection

**Mission Statement:** To provide the best protection and service possible with pride, honor, and integrity.



The Orange Beach Fire Department consists of four fire stations with 75 employees, of which 63 are firefighters. The leadership team is made up of the Fire Chief, Deputy Fire Chief, Assistant Chief of Training, three Battalion Chiefs, Beach Safety

Division Chief, Fire Marshal, and Deputy Fire Marshal. All Orange Beach Fire Department personnel receive specialized training for conditions that are unique to waterfront communities. Training ensures that firefighters are prepared for incidents that include fire suppression, vehicle extrication, SWAT, medic, angle rope rescue operations, "Backcountry Trail" rescues, marine and personal watercraft operations, underwater dive, and surf rescues.

The Orange Beach Fire Department equipment inventory includes specialty equipment designed to assist with all types of operations and rescues. The following two tables provide the inventory of major equipment and the types of responses that were answered over the five-year period from 2014 to 2018.

Major Fire Rescue Equipment Quantities		
Pumper Trucks	5	
Ladder Trucks	3	
Ambulance	3	
ATVs and UTVs	12	
Boats	2	
Jet Skis	5	

Life is better here

Source: Orange Beach Fire Department

Fire Department Responses 2014-2018					
YEAR	2014	2015	2016	2017	2018
FIRE CALLS	45	39	44	32	54
RESCUE	1,439	1,696	1,700	1,794	1,911
HAZARDOUS CONDITIONS	37	27	46	64	48
GOOD INTENT	212	209	257	207	247
FALSE CALLS	494	426	424	483	519
TOTAL CALLS	2,520	2,714	2,819	2,866	3,081

Source: Orange Beach Fire Department



#### **Police Protection**

**Mission Statement:** To serve and protect paradise with unparalleled integrity, professionalism, and respect for the entire Orange Beach community.



The City of Orange Beach Police Department is located in the Orange Beach Justice Center. The department includes approximately 80 employees organized in four divisions: patrol, investigative, intelligence, and support services. There are currently 53 full-time sworn officers and three part-

time sworn officers. A new police substation and training operations center is needed north of the Intracoastal Waterway. This facility is needed to house an indoor firing range and training facility and should be constructed for utilization as an emergency operation center during significant storm events.

Wireless security cameras are needed at various locations in the city to monitor public areas. Areas that should be monitored are boat ramps, public beach parking areas, municipal buildings, municipal marinas and other areas where high value targets are left unattended for long periods of time. Additionally, cameras at key roadway intersections would be beneficial for monitoring traffic flow and accidents.

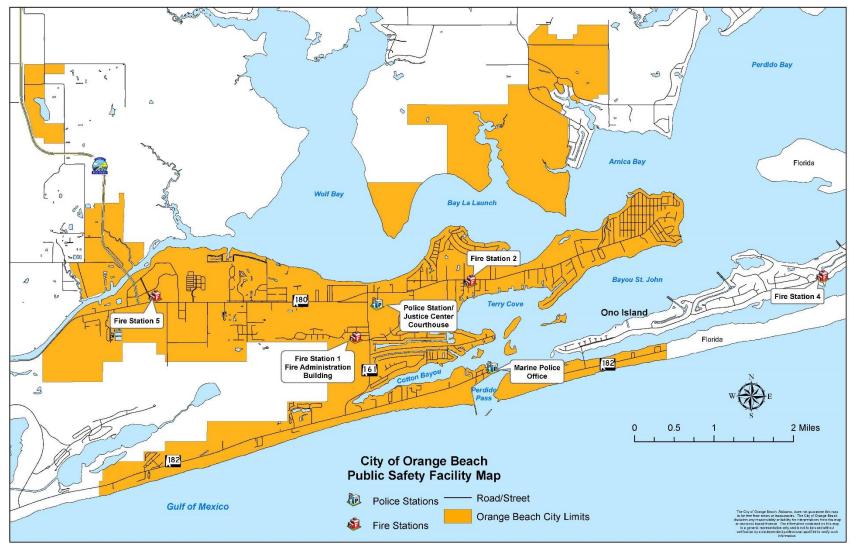
POLICE INFORMATION SUMMARY 2018		
CALLS FOR SERVICE	19,811	
CRIMES		
TOTAL	673	
HOMICIDE	1	
RAPE/SEX OFFENSE	12/10	
ROBBERY	0	
ASSAULT/HARASSMENT	23/58	
VIOLENT CRIMES	0	
BURGLARY	20	
THEFT	237	
VEHICLE THEFT	14	
TRAFFIC RELATED DUI/DRUGS	188/110	
ACCIDENTS		
TOTAL	458	
VEHICLE SERIOUS INJURY	3	
VEHICLE FATALITIES	0	
PEDESTRIAN SERIOUS INJURY	1	
PEDESTRIAN FATALITY	0	
ACCIDENTS		
PRIVATE PROPERTY ACCIDENTS	267	
ADULTS JAILED	1,249	

Life is better here

Source: Orange Beach Police Department



Life is better here





Life is better here

# <u>Library</u>

The Orange Beach Public Library was established in 1992. The facility is open six days a week, and membership does not require residency in Orange Beach. There are five full-time paid librarians, along with full-time and part-time paid staff.

Orange Beach Library Information				
Number of registered users	8,356			
Total number of library visits	76,015			
Total book circulation	71,358			
Total circulation (book, electronic, and other)	108,159			
Total collection use	112,849			
Total library programs (adult, young adult, and juvenile)				
	356			
Total program attendance	6,184			
Number of public computers	17			

Source: Orange Beach Public Library

Programs provided at the library are shown below.

Adult Programs
Chess Club
Book Clubs
Puzzle Club
Adventures in Yarnia
Book-A-Librarian
Test Proctoring

<u>Youth and Children</u> Story Time Full S.T.E.A.M. Ahead Dub Club Lego Club Minecraft Guild A branch library north of the Intracoastal Waterway will be needed when the Wolf Bay Bridge is complete and this area is developed.

#### Parks and Recreation

The City of Orange Beach offers a variety of parks and recreational facilities for its residents and visitors of all ages. City-owned recreational facilities and their associated amenities are listed below. In addition to the civic facilities, the City is home to many sporting tournaments that take place throughout the year.

#### Aquatics Center

Junior Olympic swimming pool with 11.5 foot diving well and one meter board, tube slide and separate 25 X 25 wading pool with spray and waterfall features. The center offers swimming lessons, water aerobics and other activities.



### Camp Sunshine

After school and summer day camp program. Four classrooms, basketball courts, swings, and picnic tables. Available to year round residents of Orange Beach only.



Life is better here

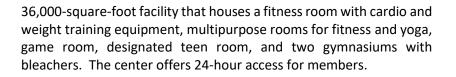
# Golf Center

Features include a 9-Hole Par-3 Course, lighted driving range, practice putting/chipping greens, practice sand bunker, driving range with ball dispensers, pro shop and meeting rooms. Open seven days a week.

#### Indian & Sea Museum

Housed in a 1910 school house, this museum contains local artifacts and memorabilia relating to the area's Native American and fishing heritage. Admission is free.

#### Recreation Center



#### Senior Center/Adult Activity Center

Located adjacent to the Orange Beach Public Library, the center offers meeting rooms, game room, art and crafts room, kitchen, and patio/gardens with fountain. Senior programming is provided including planned trips, socials, games, fitness classes and crafts.

#### Orange Beach Community Center

8,000-square-feet building with commercial kitchen and wooden dance floor. Facility can be divided into two separate rooms, available for rental.

#### Wind & Water Learning Center

Wooden sailing loft with two bay doors, pier and boat lift; offers classes in sailing, paddle boarding and other water sports.

#### <u>Sportsplex</u>

Regulation soccer stadium, soccer practice field and multi-purpose field, lighted baseball and softball fields with bleachers, sand volleyball court, three concession buildings, playground, and entrance to Backcountry Trail.

#### **Tennis Courts**

Eight lighted hard courts are available. USTA tournaments/leagues, monthly themed socials, Kids Summer Tennis Camps, private lessons, semi-private lessons, group clinics, team drills, and cardio tennis are available.

#### Canoe Trail

Fifteen-mile trail comprised of 12 designated canoe trail sites along the shores of Wolf Bay, Bay La Launch, Arnica Bay, Bayou St. John, Terry Cove and Cotton Bayou.



Life is better here

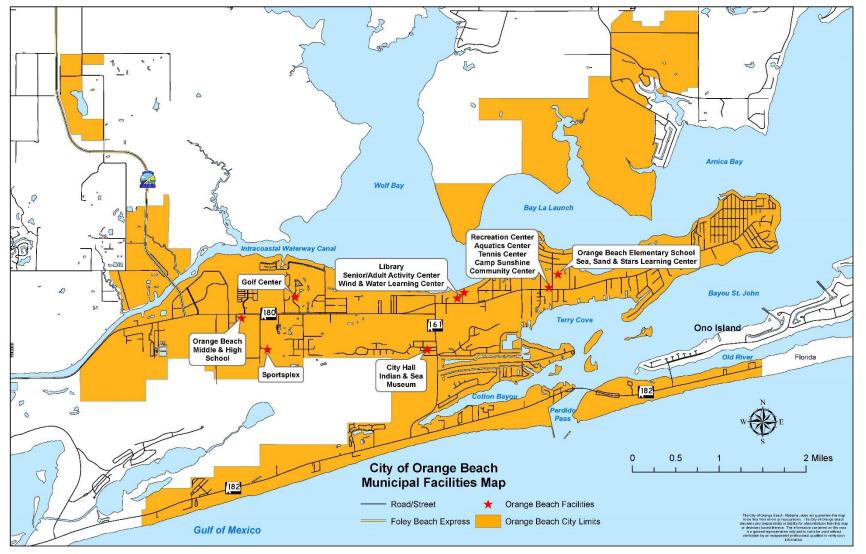
# **Coastal Arts Center of Orange Beach**

4-1/2 acre facility featuring a 10,000 square-foot fine arts gallery with meeting space and a gift shop, hot glass blowing studio, clay studio, and art education studio. The waterfront gallery showcases over 100 fine artists and is a venue space for weddings, concerts and special events. The facility hosts the Arts Afire Festival, Saturday Flings, Hot Shop Blowouts, Light Up The Arts, artist receptions and community picnics. The main event is the Orange Beach Festival of Art, a fine arts festival showcasing 2D, 3D, culinary, performance, music, and kids art. Attendees exceed 15,000 persons and the event is free of charge.





Life is better here





Life is better here

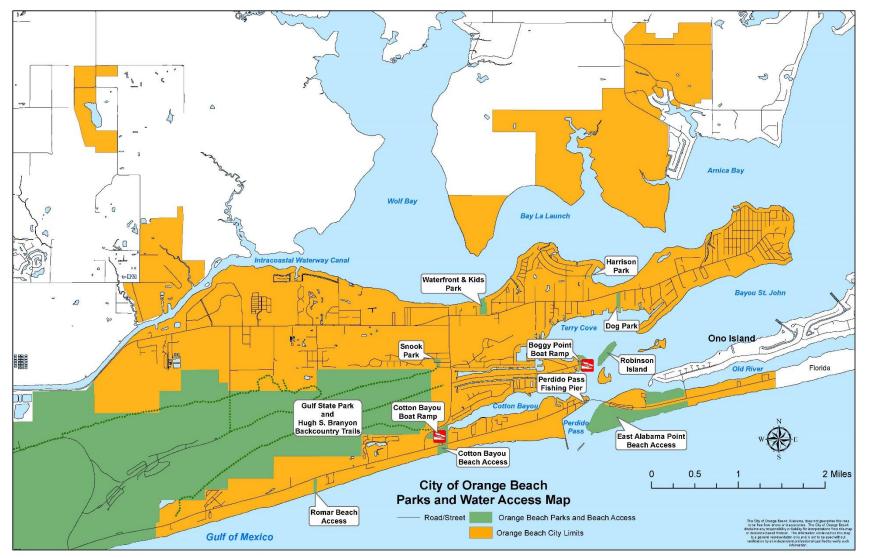
# Parks and Water Accesses

The following is a list of parks located within the City of Orange Beach.

PARK NAME	EQUIPMENT
WATERFRONT PARK	Waterfront park comprised of a pier, pavilions, picnic tables, grills, beach, and restrooms, located on
	Wolf Bay
KIDS PARK	Creative play area with slides, swings, and climbing structures
HARRISON PARK	Waterfront park with pavilion and picnic area, located on Cypress Cove
ROBINSON ISLAND	Sandy, natural island located north of Perdido Pass
DOG PARK	Fenced dog park separated into areas for large and small dogs with benches, water stations and
	training areas, located on waterfront property on Terry Cove
DISC GOLF PARK	Disc golf course for self-guided play, located on waterfront property on Terry Cove
SNOOK PARK	Community park on municipal campus with a picnic pavilion, horseshoe pits and swings
GULF STATE PARK BACKCOUNTRY TRAIL	27 miles of trails through six different ecosystems with a bird viewing station, parkour challenge
	course, boulder park and pavilion
BOGGY POINT BOAT RAMP	State-owned facility comprised of two boat ramps with public parking, located north of Perdido Pass
COTTON BAYOU BOAT RAMP	State-owned facility comprised of two boat ramps with public parking, located on Cotton Bayou
COTTON BAYOU BEACH ACCESS	State-owned Gulf-front beach access with public parking and restrooms, located east of State
	Highway 161
ROMAR BEACH ACCESS	State-owned Gulf-front beach access with public parking, located east of Romar Beach
EAST ALABAMA POINT BEACH ACCESS	State-owned facility comprised of two Gulf-front beach accesses with public parking and restrooms,
	located on the east side of Perdido Pass
PERDIDO PASS SEAWALL PARK	State-owned facility comprised of boardwalk with fishing stations and public parking, located on the
	west side of Perdido Pass



Life is better here





Life is better here

# Schools

Orange Beach Elementary School has a student enrollment of approximately 450 students. Until the 2019-2020 school year, middle and high school students attended school in nearby Gulf Shores. A new middle and high school complex are under construction in Orange Beach. Classes will begin in the 2019-2020 school year in temporary facilities, and the new middle/high school will open in fall of 2020. The new school complex will include a 700-seat performing arts center and athletic facilities.





# Life is better here

#### Water

The Orange Beach Water Authority provides water service to the City of Orange Beach; a public utility company established in 1968 to provide water, sewer and fire protection services to southern Baldwin County.

### Sewer System

The City of Orange Beach Sewer Department collection and wastewater treatment facility consists of 25 lift stations that transfer all domestic and commercial waste to a treatment plant sized to handle 10 million gallons a day. The collection system is comprised of low pressure and gravity lines, primarily located within the corporate city limits of Orange Beach. Other areas served by the water treatment facility are low-pressure lines to Ono Island and the Miflin Creek region.

### Solid Waste

The Orange Beach Public Works Refuse Division keeps all of the public rights-of-way clear of trash and debris. This department also provides weekly refuse service to residential customers disposing of vegetative yard debris and household debris including appliances and furniture. Residential garbage and recycling are collected by a private contractor. Garbage is picked up twice weekly, and recycling once every two weeks.

#### **Hazardous Waste**

Hazardous waste is monitored by the Alabama Department of Environmental Management (ADEM). Businesses are responsible for their own waste and should contact ADEM for determinations of whether waste is categorized as hazardous and proper disposal methods.

#### **Gas Service**

Gas service is provided by the Clarke-Mobile Counties Gas District, which serves residential, commercial and industrial customers in multiple South Alabama counties.



Life is better here

#### GOAL AND RECOMMENDATIONS

### <u>Goal</u>

Continue to provide superior facilities and services to all residents of Orange Beach.

### **Recommendations**

- 1. Construct a police sub-station/train operations center
- 2. Expand the Justice Center
- Provide further fire stations on Perdido Beach Boulevard, Canal Road and/or across the Gulf Intercoastal Waterway on newly annexed lands
- 4. Construct an additional boat ramp
- 5. Expand parking at public beach accesses
- 6. Provide high-speed broadband internet to all properties located within the municipal corporate limits